

**GUAM EPA
TITLE V FEDERAL OPERATING PERMIT
STATEMENT OF BASIS**

**Naval Facilities Engineering Command Marianas
Naval Hospital, SIC Code 80**

Permit No. FO-015B

Facility ID:	FO-015
Facility Name:	Naval Facilities Engineering Command Marianas, Hospital, SIC Code 80
Mailing Address:	PSC 455, Box 195 FPO AP, Guam 96540
Responsible Official:	NAVFAC Marianas Commanding Officer
Title:	Commanding Officer
Phone Number:	(671) 339-5100
Contact Name:	Refer to Updated Inventory Spreadsheet for pertinent info.
Title:	
Phone Number:	
Person Responsible for Recordkeeping:	Refer to Updated Inventory Spreadsheet for pertinent info.
Title:	
Phone Number:	

I. Purpose

The purpose of this engineering evaluation is to identify all applicable requirements, determine if the facility will comply with those applicable requirements, and provide the legal and factual basis for proposed permit conditions.

II. Facility Location

Naval Facilities Engineering Command Marianas, USNH facility is located at Bldg. 2A, Stone Road, Naval Hospital, Guam.

III. Description of Facility Operations

The facility consists of three hot water and/or steam producing boilers.

IV. Equipment Listing and Permitting History

IV.A. Significant Emission Units

A listing of all permitted equipment at the facility is presented in the table below. This table also includes the Guam EPA (GEPA) permit number for those emission units with existing permits. The conditions from these permits have been incorporated into the Title V permit, which supercedes the existing GEPA permits.

Emission Unit Number	Unit Description	Associated Control Equipment	Guam EPA Permit Number
322	8.369 million British thermal units per hour (MMBtu/hr) diesel-fired boiler	N/A	NHP-735
323	8.369 MMBtu/hr diesel-fired boiler	N/A	NHP-735
324	8.369 MMBtu/hr diesel-fired boiler	N/A	NHP-735

IV.B. Insignificant Emission Units

According to the permit application provided by the applicant there are no insignificant activities at the facility.

V. Potential to Emit

The annual potential to emit for each significant emission unit is presented below.

Emission Unit	Potential to Emit (tons/year)						
	NO _x	CO	SO ₂	PM ₁₀	VOC	Lead	HAPs
ID 322	5.24	1.31	37.20	0.52	0.15	3.30E-04	2.07E-02
ID 323	5.24	1.31	37.20	0.52	0.15	3.30E-04	2.07E-02
ID 324	5.24	1.31	37.20	0.52	0.15	3.30E-04	2.07E-02
TOTAL	15.72	3.93	111.60	1.57	0.44	9.90E-04	6.22E-02

VI. Guam Requirements

The following table lists the applicable requirements from the Guam Air Pollution Control Standards and Regulations (GAPCSR) and from the approved Guam State Implementation Plan (SIP). For rules where an applicability determination was required, a discussion is included below.

Section 1103.2	Guam Ambient Air Quality Standards
Section 1103.3	Visible Emissions

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Section 1103.4	Fugitive Dust
Section 1103.10	Sulfur Oxides from Fuel Combustion
Section 1103.11	Open Burning
Section 1103.12	Control of Odors in Ambient Air
Section 1103.13	Asbestos
Section 1104	Permit Program Regulations
SIP, Section 7.5	Particulate Emissions from Fuel Combustion

VI.A. Particulate Matter (PM) Limits for Fuel Burning Equipment

Appendix E Chapter 7.5 of the GEPA SIP requires that for fuel burning equipment between 1 MMBtu/hr and 1,000 MMBtu/hr in size, the allowable particulate emissions shall be calculated using the following equation:

$$Y = 1.02 X^{-0.231}$$

Where:

Y = Allowable particulate emission rate (lb/MMBtu)

X = Operating rate (MMBtu/hr)

The boilers (Units 322, 323, and 324) are subject to this limit. The allowable PM emission rate for each unit must be determined by the permittee depending on the operating load for each unit.

VII. Federal Requirements

The following table lists the applicable requirements from United States Environmental Protection Agency (USEPA) regulations. For rules where an applicability determination was required, a discussion is included below.

40 CFR Part 61, Subpart M	Asbestos
40 CFR Part 69	Special Exemptions

VII.A. New Source Performance Standards (NSPS)

Each boiler in the facility has a maximum design heat input rating below the 10 MMBtu/hr threshold for boilers subject to NSPS subpart Dc (40 CFR Part 60, Sections 60.40c to 60.48c).

VII.B. Compliance Assurance Monitoring (CAM)

Compliance Assurance Monitoring (CAM) is intended to provide a reasonable assurance of compliance with applicable requirements for large emission units that rely on pollution control device equipment to achieve compliance. The CAM regulations can be found in 40 CFR Part 64. CAM applicability is determined on a pollutant-specific basis.

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According to these regulations, an emission unit that meets all of the following criteria is subject to CAM:

1. The unit is located at major source required to obtain Part 70 or 71 permit;
2. The unit is subject to an emission limitation for the applicable pollutant;
3. The unit uses a control device (as defined by 40 CFR 64.1) to achieve compliance;
4. The potential precontrolled emissions of an applicable pollutant from the unit are equal to or greater than the major source threshold for that pollutant; and
5. The unit is not otherwise exempted by the CAM regulations.

Regarding the first requirement, the CAM rule (in 40 CFR 64.1) states that “*Part 70 or 71 permit* shall have the same meaning as provided under [40 CFR 70 or 71] provided that it shall also refer to a permit issued, renewed, amended, revised, or modified under any federal permit program promulgated under Title V [of the Clean Air] Act.”

After receiving a special exemption from USEPA, GEPA has adopted an “alternate operating permit program” according to the requirements of 40 CFR 69.13. As a result, it was not immediately clear whether this program satisfied the definition in the CAM rule.

USEPA Region 9 was consulted on this matter, and made a determination that GEPA’s alternate operating permit program was promulgated under Title V of the Clean Air Act, so facilities located on Guam are potentially subject to CAM.

Emissions from the diesel-fired boilers (Units 322, 323, and 324) at the facility are not controlled and are less than all of the major source thresholds.

Conclusion: None of the emission units at the facility are subject to CAM.

VIII. Periodic Monitoring and Recordkeeping

Requirement	Requirement Condition #	Existing Monitoring/ Recordkeeping	Monitoring/ Recordkeeping Added to Permit	Monitoring/ Recordkeeping Condition #
PM emission limit for boilers	II.B.1.a		Opacity monitoring	II.D.6
Opacity limits for boilers	II.B.1.b		Opacity monitoring	II.D.6
Preventative maintenance for boilers	II.C.1		Maintenance recordkeeping	II.E.4
Fuel sulfur content limit for boilers	II.C.2	Fuel sulfur content recordkeeping		II.E.2
Reasonable precautions against airborne fugitive dust	II.C.3	None		N/A
Fugitive dust discharge limitations	II.C.4	None		N/A

IX. Streamlining Applicable Requirements:

Consistent with USEPA policy, overlapping or redundant requirements may be streamlined when these are incorporated in a Title V permit. In this process, the most stringent of the overlapping requirements is determined and included in the Title V permit (while the source of authority for this condition lists all related requirements, including those that have been streamlined). Streamlining allows the permit conditions to be listed in a clear and concise manner while ensuring compliance with all applicable requirements. The following section contains a description of streamlining that has been performed in this permit.

Condition II.C.2 – Fuel Oil Sulfur Content Limitation for Boilers

GEPA Permit NHP-735 states that the fuel oil used in the diesel-fired boilers (Units 322, 323, and 324) shall not exceed 1% sulfur content (maximum) by weight at any time and the average over the past twelve month period (including the last month reading) shall not exceed 1.0% sulfur content by weight. GAPCSR Section 1103.10 states that no person shall burn fossil fuel containing in excess of 2.0% sulfur by weight. Since the requirement in the GEPA permit is more stringent, the 1.0% sulfur limit was included in the permit.